



ALEXIUM

ALEXIUM INTERNATIONAL GROUP LIMITED

Investors' Webinar

FY2024 Q4 Quarterly Activities Report

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ABN 91 064 820 408

PRESENTED IN US DOLLARS

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FY23 – 27 Strategic Plan - Objectives



Grow and Diversify Revenue.

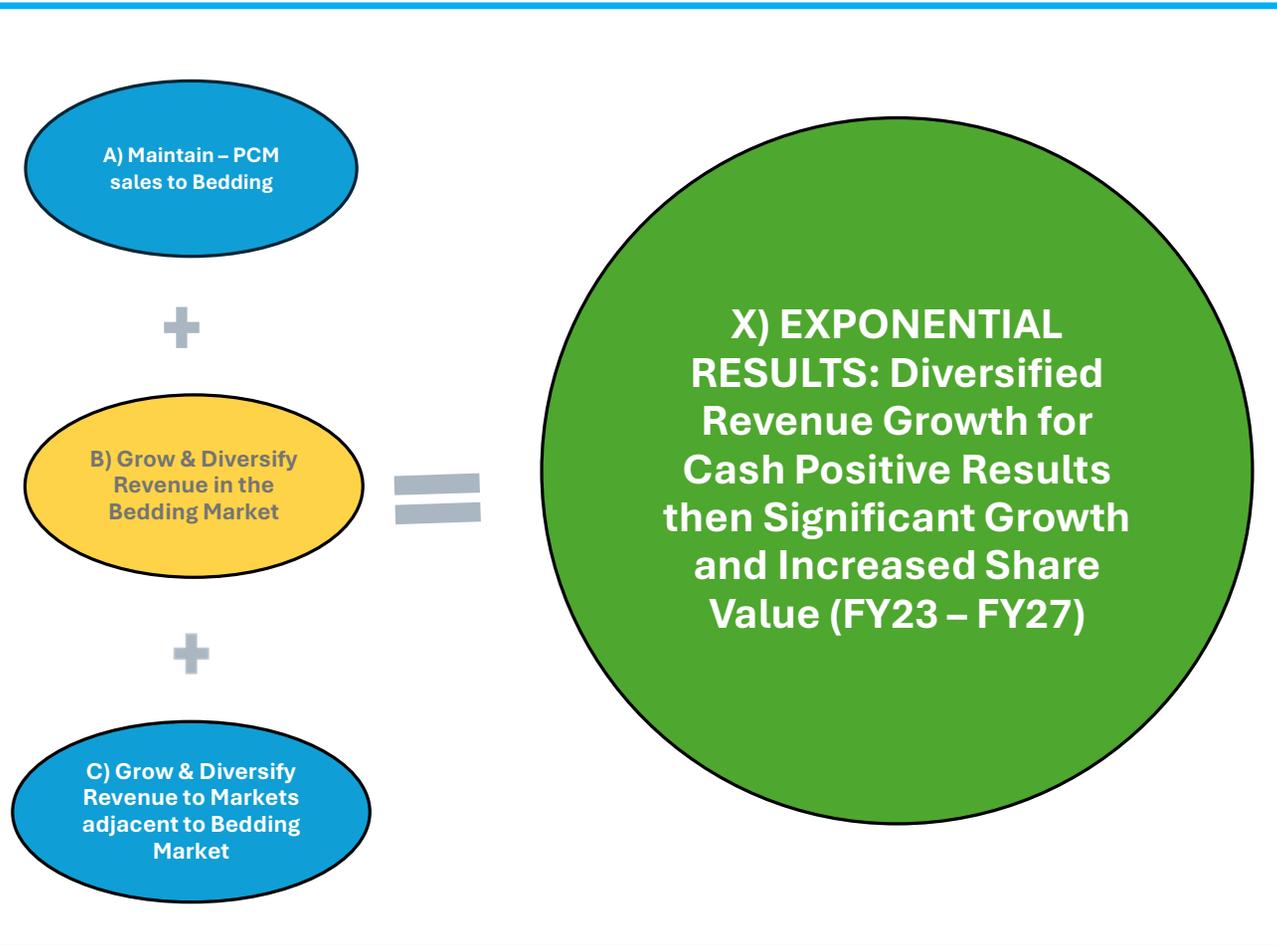
Grow and Diversify revenue in two areas: 1) Core Market (bedding), & 2) Adjacent Markets (non-bedding).

- 1) To ***Grow and Diversify*** revenue in the bedding market, the company must:
 - a. break new accounts to address the over-concentration within one major brand
 - b. diversify our products sold to the bedding market to address the over-concentration of PCM sales
 - c. break new accounts globally to address the over-concentration in the North American bedding market

- 2) To ***Grow and Diversify*** revenue in adjacent markets, the company must:
 - a. break into new markets with Alexium's existing technologies (existing tech to new markets)
 - b. modify the company's technology to create new market entries (new tech to new markets)
 - c. focus only on the fastest routes to new, large, and reoccurring revenue (only a few at a time)

FY 25 Objectives: Alexium's short-term (FY25) objective is to create sustained month-over-month cash positive results. This objective can be achieved in the Core Market. Then, the company's medium to long-term objective is significant growth and sustained profits from the combination of executing both areas of the ***Grow and Diversify*** strategy in parallel.

FY 23 – 27 Strategic Plan - Growth drivers



$$A + B + C = X!$$

A) Alexium must maintain its foundational PCM sales to existing customers in North America in its core market of bedding.

B) Sales growth through further saturation of that core market, then adding customers, then additional growth from the diversified products sold in the bedding market. In parallel, globally replicate this approach.

C) To mitigate over-concentration in bedding, AJX must break into adjacent markets, including FR for military fabrics, workwear and other home goods as well as thermal regulation for athletic gear, footwear, headwear, medical applications, packaging, and electronics.

When we execute “A + B + C”, Alexium will be cash positive, self-funding and have a higher share price with sustained year-over-year growth.

FY24 – 27 Strategic Pathway

FY23 Focus

- ✓ **Team** : Strengthen the organisation with the addition of a new CEO and increased focus of Dr Brookins on technology/product development
- ✓ **Culture** : One Team.
- ✓ **Growth (70:20:10)**
 - ✓ Year-on-year revenue growth in core bedding market (Alexicool®, BioCool®, DelCool™, Eclipsys®)
 - ✓ Progress FR Nyco for military.
 - ✓ Commercialise Eclipsys® for Tactical gear
 - ✓ Commence product testing with Alpha customers in new markets (e.g., shoes, cold chain)
- ✓ **Operations** : Secure the Company's supply chain to ensure resiliency
- x **Financial** : Cash flow positive

FY24 Diversify

- ✓ **Team** : Build out direct sales and BD
- ✓ **Culture** : Sales and marketing centric
- ✓ **Growth (40:20:40)**
 - ✓ Year-on-year revenue growth in core bedding market (Alexicool®, BioCool®, DelCool, Eclipsys®)
 - ✓ Progress FR Nyco for military.
 - X Commercialise Eclipsys® for tactical gear
 - X Commercialise Eclipsys® and FR in new markets (e.g., shoes, cold chain, workwear)
- ✓ **Operations** : Secure the company's supply chain to ensure resiliency
- X **Financial** : Cash and commercial discipline. Cashflow positive
- ✓ **Funding** : Adequate funding in place

FY25-27 Profitable Growth

- **Team** : Bolster operations team, mature sales execs
- **Culture** : One Team – Customer-centric, Success breeds success.
- **Growth (40:20:40)**
 - Capitalise on globally unique and patent-protected product range
 - Commercialise key product platforms in major international markets
 - Expand the product application range into large adjacent markets (e.g. outdoor apparel/gear, shoes, automotive, electronics)
- **Operations** : Realise benefits of increased scale
- **Financial** : Material growth in earnings, cashflow and share price

FY24 Strategic Plan - Update



- **Team:** Build out direct sales team, add direct marketing expertise and bolster product development

Status:

- ✓ Two new sales executives onboard.
- ✓ Retained direct marketing expert to assist with marketing campaigns.
- ✓ Retained a PCM industry expert and added a Product Manager role.

- **Culture:** Become more sales and marketing centric.

Status: The team at Alexium is highly motivated to drive the full commercialisation of all existing company technologies. They are excited to have the new team members on board so they can support our *Grow and Diversify Revenue* strategy. All team members at AJX know this phrase well: *“We are ALL in sales, because we ALL serve the customer”*.



FY24 Strategic Plan - Update (cont.)

- **Growth** – Diversify (40 : 20: 40) :

Status: All key initiatives are on track and progressing.

- ✓ Maintained the primary focus on short-term gains in our core market (bedding), while executing a disciplined plan for new developments in adjacent markets (non-bedding).

- ✓ Achieve year-on-year revenue growth in core bedding market with core product offerings (Alexicool[®], BioCool[®], DelCool[™] and Eclipsys[®] products). Look to add new sales from the Alexium FR product suite (Alexiguard[™] and Alexishield).

- ✓ Progressed FR Nyco for military.

- ✓ Commercialised Eclipsys[®] fabric for tactical gear.

- X Commercialised PCM, Eclipsys[®] fabric, and FR into new markets (e.g. shoes, cold chain, workwear).



FY24 Strategic Plan - Update (cont.)

- **Operations:** Secure the Company's supply chain to ensure resiliency.

Status:

- ✓ Added a textile engineer to lead textile supplier qualifications.
- ✓ Added key raw material backup sources bolstering the supply chain.
- ✓ Adding new toll manufacturers for FR products leading to significant cost reductions.

- **Financial:** Cash and commercial discipline. Cashflow positive.

Status:

- ✓ Develop a pipeline with ample qualified opportunities to deliver short-term results.
- ✓ Added new sales professionals to close the pipeline opportunities.

- **Funding:** Adequate funding in place to execute the business plan.

Status:

- ✓ Judicious use of the recapitalisation funds to add key personnel to expedite short-term revenue growth.

Alexium Product Portfolio



PCM Comfort Technologies

AlexiCool®

- Premium PCM cooling for mattress and top of bed
- Absorbs heat while providing comfort and coolness

BioCool™

- Microencapsulated PCM products (mPCMs) for textile/foam applications
- USDA BioPreferred Certified (mPCM) with 94% biocontent
- EcoCert COSMOS Certified (PCM)



New Comfort Technologies

DelCool

- Newest introduction to Alexium's thermal management product portfolio
- Textile composite based on a patent pending, first-in-class technology
- Humidity management improves comfort all night long

Eclipsys®

- Textile composite for infinite comfort
- Improves heat flux in bedding, shoes, tactical gear and body armor components by more than 100%

Flame Retardant Technologies

alexiflam®

- Customised solutions
- Designed for use in a variety of markets: bedding, FR mattress socks, FR suits (PPE), Military fabrics, and carpet

alexiguard

- Flame retardant emulsion for use on 100% polyester fabric
- Nontoxic aqueous based solution, free from halogen, antimony, formaldehyde and phosphate salts



FY24 Highlight

Leveraging Alexium's
Legacy Flame Retardant
(FR) Technologies



Background of Alexium Flame Retardant Technologies:

Alexiflam[®] is a polymeric organophosphorus aqueous flame retardant for 100% cotton and cotton rich fabric blends. Formulations prepared with **Alexiflam**[®] offer excellent flame retardancy and wash durability up to 75°C. Applications for this product include FR socks for mattresses, wash durable workwear, and military apparel. **Alexiflam**[®] is one of the company's original products and was born out of development work for the Air Force.

Alexiguard[™] is a multifunctional oligomeric phosphate ester flame retardant emulsion for use on 100% polyester fabric. **Alexiguard**[™] is a complete aqueous based solution, free from halogen, antimony, formaldehyde and phosphate salts, lending to its nontoxic nature and environmentally friendly manufacturing. **Alexiguard**[™] was originally developed as a complementary product to Alexiflam[®] to address the flame resistance requirements for synthetic substrates in the home goods and bedding industries.

alexiflam[®]

alexiguard



FY24 Highlight

Leveraging Alexium's
Legacy Flame Retardant
(FR) Technologies



In FY24, great progress was made to advance the company's FR Market opportunities. AlexiFlam® developments were focused on advancing the flame-resistant nylon/cotton fabric (FR NyCo) for military apparel fabric, and early-stage work on adapting the chemistry for the stringent wash durability required for industrial work wear. Significant enhancements were made to the original Alexiguard™ formulation to adapt it for applications to multiple fabric types. Lastly, the technical team delivered a new FR chemistry free of any current banned substances, and free of many substances which are proposed to be banned.

alexiflam®

alexiguard

alexishield



FY24 Q4 Highlights

Leveraging Alexium's
Legacy Flame Retardants
Technologies

Alexium FR Product Suite:

1. **Alexiflam[®]** is a polymeric organophosphorus aqueous flame retardant for 100% cotton and cotton rich fabric blends. **It is wash durable and an excellent option for FR finishing on warm weather, lower cost fabrics for military apparel and work wear.**
2. **AlexiGuard[™] IM** (“intermediate”) – A robust FR chemistry that the company uses as an FR component in its microencapsulated PCM, in its AlexiFlam[®] FR technology (wash durable), and it can be utilised as a dual-purpose component in formulations for its flame resistant and softening attributes.
3. **AlexiGuard[™] FP** (“finished product”) – A specialty formulation utilising the intermediate that has robust applications in flame resistant barrier fabrics for mattresses. It is a very effective add-on to FR barrier fabrics that have marginal performance. It allows the fabric weights to be lessened, which creates a cost-neutral, or cost-saving option with drastically improved performance.
4. **AlexiShield** – A new formulation that is in the plant trial phase. It is free of any currently, or proposed, banned substances. It has the same powerful value proposition as AlexiGuard[™]: cost and performance improvement.



FY24 Highlight
Leveraging Alexium's
Legacy Flame Retardant
(FR) Technologies



Year-on-Year Revenue Growth - Leveraging Legacy Technology:

Short-term Growth Outlook:

alexiflam®

Military FR Fabric:

The Company will continue its efforts to develop a cost effective, warm weather FR NyCo fabric for the Military. AJX will continue to partner with established and trusted US-based military textile producers for manufacturing readiness. Trials expected to commence in H1 FY25, with the potential for significant revenue in FY26. The market opportunity is conservatively valued at \$5MM - \$11MM per annum.

FR Work Wear Fabrics:

In H2 FY25, the Company will shift development efforts to advancing the wash durability of various organic and synthetic AlexiFlam® finished fabric blends in preparation for market entries into the work wear market. The opportunity size is yet to be determined but expected to be significantly larger than the military opportunity. Commercial lead times are usually shorter as well.



FY24 Highlight

Leveraging Alexium's
Legacy Flame Retardant
(FR) Technologies



Year-on-Year Revenue Growth – Leveraging Modified Legacy Technology:

Recent regulations have banned certain substances from FR materials approved for use in the US bedding market. This created significant near-term opportunities for AJX. The regulations have banned certain substances like fiberglass, formaldehyde, and PFAS from use in these products. AlexiGuard™ is free of these substances.

Near-term Growth Outlook:

alexiguard

North American Bedding Market:

Alexium has several new opportunities for Alexiguard™ placements in the North American bedding market. These opportunities are for rayon and poly-based barrier fabric finishing for mattresses and mattress foundations. AJX has tested several customers' target fabrics at the lab scale, with passing indicative burn tests. There have also been a number of successful pilot scale trials on production fabrics with all pending mattress builds for passing the ASTM Mattress Burn tests within Q1 FY25. There are several more customer fabrics in the testing queue at Alexium now. Additionally, AJX is in discussions with an international FR Sock supplier to bring a high-quality, cost-effective FR Sock to the US mattress market. Near-term revenue opportunities are in the \$1MM – 3MM, then substantially larger annual revenues thereafter.



FY24 Highlight
Leveraging Alexium's
Legacy Flame Retardant
(FR) Technologies

Year-on-Year Revenue Growth – Differentiating Through New Technology:

Beyond the advancements to the Company's AlexiGuard™ FR technology, there has been a breakthrough in developing an FR technology to address opportunities arising from additional substances being proposed for bans in certain markets and states. In FY24, the Company proved the effectiveness of this new FR chemistry, Alexishield, in pilot-scale trials.

Near-term Growth Outlook:

alexishield

Alexium has entered an agreement with a top-3 worldwide bedding brand for the exclusive use of AlexiShield in FR barrier fabrics for many of its top-end mattress lines. The Agreement has exclusivity terms into H2 FY25, where the obligation is to work together to deliver passing mattress burns for models using AlexiShield finished FR barrier fabrics. Based on those results, the companies will negotiate a long-term supply agreement with pricing and defined minimum volumes.

FY25 Plan – Overview



In FY25, Alexium embarks on the next phase of executing our *Grow and Diversify Strategy*. Alexium will now execute a plan to aggressively grow revenues in its core and breakthrough markets. We have been successful in recruiting new professionals to deepen the skills and bandwidth of sales. Now, we will structure the team to focus on the following critical focus areas:

- I. Maintaining the Company's key accounts and sales in the North American bedding market
- II. Saturating the N. American bedding market through diversification of product and customer mix
- III. Sales growth by breaking new accounts abroad in the APAC, LATAM and EU bedding markets
- IV. Diversified revenue growth from new sales of the company's existing technologies into adjacent markets (Eclipsys[®], DelCool[™], Alexiflam[®], Alexiguard[™] & Alexishield).

Each team member will be responsible for driving development activity, proposing terms and closing sales across all four focus areas. We will position each team member where their skillset and experience are best aligned with the market and strategy at hand. We will set up each team member to cross-sell across Alexium technologies and markets, but each will have a primary focus such as bedding accounts, FR fabrics, and thermal regulating apparel.

FY25 Plan – Background/Sales Approach/Key Objectives

Background: In late 2023, and after a two-year slump in revenues from a weak bedding market, Alexium had to pivot and alter its approach to sales. This led to recruiting seasoned sales professionals to the sales team. Alexium also added an industry advisor to help steer the business into markets adjacent to bedding. A researcher was retained to generate a list of leads from all the company's target industries for networking and recruiting. Lastly, executive management began making sales inquiries to international targets to diversify the business from its concentration in North America.

Sales Approach: Alexium will hire and train experienced sales executives to:

- Sell the Company's products to its current core market (bedding) to further saturate its North American customer base
- Diversify the product offering to the core market by adding DelCool™, Eclipsys® and FR sales to its existing PCM sales
- Break new accounts globally (APAC, EU, LATAM) and repeat the same multi-product offering to the core market
- In parallel, but at a lesser %, sales will work on selling Alexium's existing technologies to non-bedding markets (adjacent)
- The Company will leverage the skillsets and relationships of all stakeholders to open doors for top-down sales in all areas
- Once the new team is up to speed and getting meaningful results, the Company will hire additional sales professionals to increase activity and to push further into all markets. It is likely these team members will focus solely on adjacent market development

Key Objectives:

- I. Double the month-over-month sales volume of FY24 from \$500K to \$1MM (cash-positive threshold) ASAP
- II. Reach a sustained, minimum month-over-month contracted sales volume of > \$1MM (permanently cash-positive)
- III. Secure long-term, high-volume supply agreements to shore up sustained revenues
- IV. Update the ASX regularly on these successful milestones to reinforce progress with shareholders and market
- V. Leverage this momentum, and reinvest in the business to grow Alexium to maximum earnings and a valuation that supports a share price that rewards all stakeholders